Correspondence

Nonsurgical Treatment of Lumbar Disc Sciatica

TO THE EDITOR: I congratulate *The Western Journal of Medicine* for publishing the article on outpatient treatment of lumbar disc sciatica[1] and the authors of this article for the success in their outpatient management where 39 out of 47 patients recovered without surgical treatment and without admission to hospital.

Unfortunately the authors do not describe their method of treatment in sufficient detail to permit a duplication of their study. They only reveal the following: "The strategies for home treatment include detailed instruction in bed transfer, chair and car transfer, choice of seating, easily applied and correctly fitted lumbosacral corsets, home cold pack therapy, providing hospital beds for home and raised toilet seats when necessary." This program seems to apply the principle of maintaining a low intradiscal pressure which we published more than ten years ago.[2] Had the authors used this principle even more strictly they could have further reduced the number of surgical cases.

In their discussion the authors emphasize the relatively low cost of nonsurgical treatment compared with the very high cost of surgical treatment. This may be important. But much more important in my opinion is to point out that an adequate nonsurgical management is entirely without risk while the surgical treatment carries the risk of anesthesia, the risk of infection and the risk of possible neurologic damage. Furthermore, the end results of adequate nonsurgical management are considerably better than those of surgical management.

GERALD G. HIRSCHBERG, MD
6500 Fairmount Ave, Suite 5
El Cerrito, CA 94530

REFERENCES

1. Swezey RL, Crittenden JO, Swezey AM: Outpatient treatment of lumbar disc sciatica. West J Med 1986 Jul; 145:43-46
2. Hirschberg GG: Treating lumbar disc lesion by prolonged continuous reduction of intradiscal pressure. Tex Med 1974 Dec; 70(12):58-68

On Maintaining a Professional Attitude

TO THE EDITOR: Medicare's payment policies, malpractice worries, contracting pressures, rising overhead and the like all take their toll on us out here in the real world of private practice. Is it worth it?

What's our alternative to becoming demoralized? Let's stop and think about the big picture.

Our services are "consumed" not by a nameless "customer," but usually by a sick, worried person looking for some sincere help. And the traditional personal, private physician has the most incentive to provide this humane care. But employers, insurance companies and patients aren't very loyal when they think they can save money (although they are now learning the lessons of "bargain basement medicine"). No matter how we are paid, however, we are still physicians.

Name a profession with as much challenge and personal satisfaction. We are the helping profession, not the suing profession. Sure we get taken advantage of. The government, the third party payers, the lawyers, and the suit-happy public are driving us crazy, and even lowering our incomes, but some things can't be taken away from us.

We know the thrill of saving a life, a limb or an eye. We hear that precious first cry, and see the smiles of brand new parents. We share the peace of that great-grandmother dying with comfort and dignity. We can prevent heart attacks and cancer. We listen to the depressed soul sharing his most sensitive secrets. Our simplest reassurances and recommendations are powerful. We are trusted and needed, and we usually come through. It feels good.

We are indeed fortunate to be physicians. Let's not dwell on the negative and forget to be positive and constructive.

Medicine, America's greatest profession, is now challenged by this demand for "lowest bidder" services. Buckling under may cost us our pride and spirit. Colleagues, it's time to take a deep breath, smile, and prepare for battle with the fiscal "bottomliners," private and public.

If we don't rejuvenate and defend our ideals, we'll go on to become nothing but disgruntled wage-earners. We must maintain a professional attitude that incorporates our pride in traditional standards of quality medical care. We must stick together. And we must stick to our guns.

J. GARY GRANT, MD
667 Lighthouse Ave
Pacific Grove, CA 93950

EDITOR'S NOTE Hear, hear!

MSMW

A Method of Reducing the Iodine Taste of Water Purified in the Wilderness

TO THE EDITOR: Kahn and Visscher[1] in this journal in 1975 presented a simple method of disinfecting water in the wilderness by the addition of small amounts of iodine. Subsequently Zemlyn, Wilson and Hellweg[2] reminded us that the iodine crystals are toxic and conceivably could be ingested. For this reason they urged the use of commercial tablets of tetraglycine hydroperiodide. A subsequent note by Beal[3] mentions the use of Povidone-iodine as a safe and inexpensive method of providing this material. Finally Jarroll, Bingham, and Meyer[4] showed that if the water is cold, the iodine may not completely destroy Giardia cysts and they feel boiling the water is safer.

Although boiling or some of the very elaborate filtration systems may be the preferable method, at times on the trail it is difficult to do this and the iodine treatment method provides a relatively satisfactory method to obtain disinfected water and is still recommended.[5] The major difficulty I have found with this method of purification is the rather nasty iodine taste that permeates any food or drink made from it. In a very short article in *Sports Afield,* (Kerasote T: "Camping: Modern Water Purification." *Sports Afield* 1980 Aug; 184:36) Ted Kerasote mentions that the addition of a pinch of sodium thiosulfate to a liter of treated water will neutralize the iodine and remove the taste, but this method requires the addition of another chemical, and probably is best to avoid.

Knowing that activated charcoal can remove many trace tastes and odors, I obtained some from an aquarium store and added approximately one teaspoonful of the material to a liter of water that had been previously treated with the usual iodine solution. I found that this material will absorb most if not all of the iodine taste and render the water much more palatable. Further there is no danger of toxicity. The charcoal is pro-

vided as rather large granules that are hard to drink. If it is drunk, charcoal is after all used as a universal antidote for poisons in many preparations and therefore certainly is not toxic to the body.

The material should be prepared as stated on the box—that is, put into water to wash away the fine charcoal dust that accumulates. The material is then dried. It weighs little and if kept in a lightweight plastic jar can be carried in a pack with no difficulty. Since backpackers have a great fetish for multiple uses, it is possible this material could be used also as an antidote for poison and even as a fire starter if necessary but since I have not tried either, I do not advocate them nor even feel that they are practical.

BYRON. A. MYHRE, MD, PhD
Department of Pathology
Los Angeles County Harbor-UCLA Medical Center
1000 West Carson Street
Torrance, CA 90509

REFERENCES

1. Kahn FH, Visscher BR: Water disinfection in the wilderness—A simple, effective method of iodination (Information). West J Med 1975 May; 122:450-453

2. Zemlyn S, Wilson WW, Hellweg PA: A caution on iodine water purification (Information). West J Med 1981 Aug; 135:166-167

3. Beal CB: Another method of water purification for travelers. West J Med 1981; 135:341

4. Jarroll EL Jr, Bingham AK, Meyer EA: Inability of an iodination method to destroy completely Giardia cysts in cold water (Information). West J Med 1980 Jun; 132:567-569

5. Wilkerson JA: Medicine for Mountaineering, 2nd Ed. Seattle, The Mountaineers, 1975, pp 57-58

Access to PaperChase

TO THE EDITOR: Since the article "Bringing the Medical Literature to Physicians—Self-Service Computerized Bibliographic Retrieval"[1] was published, physicians with personal computers and modems have written to us to ask how they could dial into PaperChase.

PaperChase is made available on a not-for-profit basis by the Beth Israel Hospital, Boston. Further information about PaperChase together with access numbers and a trial password can be obtained by calling the toll-free number (800) 722-2075, or by writing to the following address:

PaperChase
Beth Israel Hospital
Boston, MA 02215

HOWARD L. BLEICH, MD
LISA H. UNDERHILL, MS
Beth Israel Hospital
330 Brookline Ave
Boston, MA 02215

REFERENCE

1. Underhill LH, Bleich HL: Bringing the medical literature to physicians—Self-service computerized bibliographic retrieval, *In* Medical Informatics [Special Issue]. West J Med 1986 Dec; 145:853-858

Scuba Diver's Thigh or the Bends?

TO THE EDITOR: As a scuba diving instructor I was more than passingly interested in the letter from Dr Greenhouse and Ms Page in the November 1986 issue.[1] Their diagnosis of a special case of meralgia paresthetica, which they title "Scuba Diver's Thigh," sounds suspiciously like a classic case of the bends.

The bends are typically triggered by a too-rapid drop in ambient pressure. This allows nitrogen dissolved into the tissues to come out of solution faster than it can be transported to the lungs. If the released bubble were to manifest itself in the soft tissues surrounding the nerves it could create the pressure points Dr Greenhouse ascribes to the diver's weight belt. The amount of nitrogen dissolved into the various tissues is a function of the tissue type, pressure (due to depth of the dive) and the time spent breathing pressurized gasses.

With that in mind, I suspect the bends for two reasons.

First, and most important, the patient's dive was done to 80 feet for 50 minutes. As there was no mention of a decompression stop, I assume none was made.

If so, then the bends sounds quite likely. The US Navy decompression tables require a ten-minute stop at 10 feet specifically to allow a gradual release of microscopic nitrogen bubbles. The more conservative table used by the British Royal Navy goes off-scale and does not even list a decompression schedule for the dive she did. The closest listed dive (78 feet for 45 minutes) requires spending 5 minutes at 33 feet and an additional 25 minutes at 16 feet. Clearly, a dive to 80 feet for 50 minutes is not a wise thing to do.

It should also be pointed out that the above quoted decompression stops are for ocean diving only. If the dive was done at Lake Tahoe, which is near Dr Greenhouse's Reno practice, then additional factors are introduced. The two most significant of these are the decrease in atmospheric pressure due to the 6,000 foot altitude and the change in the specific gravity of the water. Under these conditions the US Navy required decompression schedule increases to one stop at 20 feet for 11 minutes followed by a second stop at 10 feet for 46 minutes. This is a total of 57 minutes in the water decompressing from a 50 minute dive. And again, the British table does not acknowledge the feasibility of the dive.

Presuming the dive was actually done in the ocean and the US Navy required decompression stops were completed, there still exists a possibility of the bends. The National Underwater Accident Data Council estimates the chances of the bends to be about 8 in 100,000, even when proper precautions are taken.

Second, the described symptoms of numbness lasting several weeks is classic to a bends hit caused by bubble formation in the vicinity of a nerve.

Contrast this to Dr Greenhouse's report of no similar cases of nerve damage due to weight belt pressure and the lack of abdominal enlargement, usually present with meralgia paresthetica.

As I am not a physician I won't go any further into the physiology. However, susceptibility to the bends is increased after its first occurrence. As such, I would like to suggest that Dr Greenhouse contact the Divers Alert Network (DAN) at Duke University Medical Center. They are a nonprofit organization dedicated to diving medicine and have both emergency phones (919) 684-8111 and an information line (919) 684-2948.

ROBERT FRITZ
YMCA/CMAS Instructor
2041 Vista Del Mar
San Mateo, CA 94404

REFERENCE

1. Greenhouse AH, Page K: Scuba diver's thigh (Correspondence). West J Med 1986 Nov; 145:698-699

* * *

Dr Greenhouse Responds

TO THE EDITOR: Mr Robert Fritz proposed that "Scuba Diver's Thigh"[1] was actually due to the bends. Regarding his comments, the dives were made at sea level by a person